DECLARATION UNDER 37 C.F.R. §1.132	Docket No. B0036/7000

Applicant:	Barry Blesser
Serial No:	09/922,816
Filed:	August 6, 2001
For:	ARTIFICIAL AMBIANCE PROCESSING SYSTEM
Examiner:	Andrew C. Flander
Art Unit:	2644

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The undersigned hereby declares and states:

1.   I am the named inventor in the above-identified United States patent application.

2.   I was educated at the Massachusetts Institute of Technology, Cambridge, MA, receiving a Ph.D., S.M., and S.B. in Electrical Engineering, 1969, 1965, and 1964, respectively. My field of study was Communications with thesis "Perception of Spectrally Rotated Speech.

3.   From 1965 to the present I have been the sole proprietorship of Blesser Associates Consulting Services, Belmont, MA, providing technical and management consulting services to over 100 clients with a major focus on product development including the following: first commercial electronic reverberation system, dynamic range compression, precision impedance measurement, ultra precision frequency division multiplexing for power industry, wave height measurement with light as yard stick, digital audio workstations, time compression, sample rate converters, ultra precision digital conversion, audio delivery system, audio measurement system.

4.   From 1969-1978 I was on the faculty of the Massachusetts Institute of Technology serving as an Associate Professor of Electrical Engineering & Computer Science. Taught basic and advanced electronic system courses, research member of Research Laboratory for Electronics, supervision of graduate research programs,

awarded both departmental teaching awards, sponsored research programs in pattern recognition, medical systems, audio perception, digital signal processing.

5.   From 1995-1999 I was consultant to Harman Broadcast Group, Harmon International and served as a Director of Engineering at the Orban subsidiary and Chief Technology Officer at the Orban and Studer subsidiaries. I was the manager of digital audio workstation product line and supervised engineering activities and interface between technology and business.

6.   From 1963 to the present I have been a member of the Audio Engineering Society, New York, NY. I have been a member of Publications Policy committee for 25 years and am currently Consulting Technical Editor. I was President 1980-1981 and Chairman of first Conference on Digital Audio 1982. I was awarded Bronze and Silver medals for contributions to digital audio and was elected a fellow in 1975.

7.   I am a named author in numerous papers published in reference journals including J. Audio Engineering Society, Radiology, Chest, Visible Language, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on
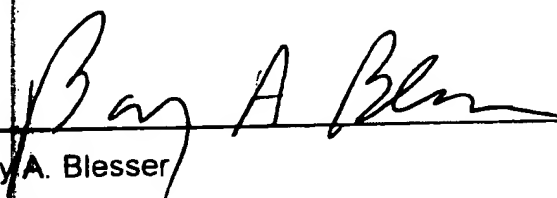Audio and Electro-acoustics, selected of which are listed in Exhibit A, attached hereto.

8.   I authored a seminal paper on digital audio in 1978 and a book chapter in the textbook Applications of Digital Signal Processing. I am currently writing a book for MIT Press, tentatively entitled " Aural Architecture" .

9.   I have a number of US Patents in audio, signal processing and pattern recognition fields, including selected of which are listed in Exhibit B, attached hereto.

10.   I have review US Patent 6,665,409, Roa, cited during the examination of the above–identified patent application, including the Figures 8A-C thereof.   The two coefficients G1 and G2 in the circuit of Figure 8B of Roa can only influence the frequency cutoff of the low-pass filter and the size of the gain maxima. These

coefficients have no influence on the frequency of gain minima and delay maxima. There is no combination of values for coefficients G1 and G2, in the design of Figure 8B of Roa '409, that will result in an amplitude output response characterized by a plurality of gain minimum at the same frequencies as the plurality of delay maximum.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 9/27/05

Barry A. Blesser

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Exhibit A

Publications by Barry A. Blesser

• Blesser, Barry, "Aural Architecture," *MIT Press* (in press)

• Blesser, Barry, "An Interdisciplinary Synthesis of Reverberation Viewpoints," *Journal of Audio Engineering Society*. Volume 49 Number 10 pp. 867-903; October 2001

• Blesser, Barry; Pilkington, Derek, "Global Paradigm Shifts in the Audio Industry-Part 1," *Journal of Audio Engineering Society*. Volume 48 Number 9 pp. 861, 862, 864-866, 868- 870, 872; September 2000

• Blesser, Barry; Pilkington, Derek, "Global Paradigm Shifts in the Audio Industry-Part 2," *Journal of Audio Engineering Society*. Volume 48 Number 10 pp. 946, 948, 950-952, 954, 956-959; October 2000

• Blesser, Barry A.; Locanthi, Bart N, "The Application of Narrow-Band Dither Operating at the Nyquist Frequency in Digital Systems to Provide Improved Signal-to-Noise Ratio over Conventional Dithering," *Journal of Audio Engineering Society*. Volume 35 Number 6 pp. 446-454; June 1987

• Blesser, B., Locanthi, B. and Stockham, T. G., Jr. (Ed.), "Digital Audio," (Papers from AES Premiere Conf.), Audio Eng. Soc., 1983

• Blesser, Barry, "Advanced Analog-to-Digital Conversion and Filtering: Data Conversion.," Paper Rye-005; Conference: Collected Papers from the AES Premiere Conference DIGITAL AUDIO; June 1982

• Blesser, Barry, "Digitization of Audio: A Comprehensive Examination of Theory, Implementation, and Current Practice," *Journal of Audio Engineering Society*. Volume 26 Number 10 pp. 739-771; October 1978

• Blesser, Barry and J. Kates, "Digital Processing in Audio Signals," A. V. Oppenheim ed., *Applications of Digital Signal Processing.* Englewood Cliffs, NJ: Prentice-Hall, 1978.

• Tan, B. T. G.; Blesser, Barry, "Comments on A Multiprocessor Approach to Digital Audio Simulation and Author's Reply,".*Journal of Audio Engineering Society.* Volume 24 Number 4, p. 285; May 1976

• Blesser, Barry A.; Baeder, Karlo; Zaorski, Ralph, "A Real-Time Digital Computer for Simulating Audio Systems," *Journal of Audio Engineering Society.* Volume 23 Number 9, pp. 698-707; November 1975

• Blesser, Barry, "An Investigation of Quantization Noise," *Journal of Audio Engineering Society.* Volume 22 Number 1 pp. 20-22; January 1974

• Bader, K. O.; Blesser, Barry, "New Methods of Automated Flutter Analysis," *Journal of Audio Engineering Society.* Volume 22 Number 2 pp. 88-91; March 1974

• Blesser, Barry; Ives, Fred, "A Reexamination of the S/N Question for Systems with Time-Varying Gain or Frequency Response," *Journal of Audio Engineering Society.* Volume 20 Number 8, pp. 638-641; October 1972

• Blesser, Barry, "An Ultraminiature Console Compression System with Maximum User Flexibility," *Journal of Audio Engineering Society.* Volume 20 Number 4 pp. 297-302; May 1972

• Blesser, Barry; Lee, Francis F., "An Audio Delay System Using Digital Technology," *Journal of Audio Engineering Society.* Volume 19 Number 5 pp. 393-397; May 1971

Exhibit B

Patents of Barry A. Blesser

4,963,703 Coordinate determining device using spatial filters

4,694,471 Digital data communicating

4,694,124 Digitizing tablet system including a tablet having a grid structure made of two orthogonal sets of parallel uniformly sized and spaced U shaped loops of conductive material

4,644,102 Digitizing tablet system

4,638,119 Position indicating apparatus for use in a digitizing tablet system

4,582,955 Digitizing tablet system including a tablet having a grid structure made of two orthogonal sets of parallel uniformly sized and spaced U shaped loops of conductive material

4,577,057 Digitizing tablet system having stylus tilt correction

4,375,081 Multistage digital filtering utilizing several criteria

4,181,820 Electric reverberation apparatus